

REMARKS

The Official Action dated May 11, 2005 has been carefully considered. It is believed that the following remarks demonstrate the patentability of claims 67-81 and 83-88, particularly in view of the Declaration Under C.F.R. 1.132 submitted herewith. Reconsideration is respectfully requested.

In the Official Action, claims 67-73 and 76 were rejected under 35 U.S.C. §102(e) as anticipated by the Roffman et al U.S. Patent No. 6,554,425. The Examiner asserted that Roffman et al disclose an intraocular correction lens having at least one aspheric surface which when its aberrations are expressed as a linear combination of polynomial terms, is capable of, in combination with a lens in the capsular bag of an eye, reducing similar such aberration terms obtained in a wavefront having passed the cornea, thereby obtaining an eye sufficiently free from aberrations. Claims 74, 75, 77-81 and 83-86 were rejected under 35 U.S.C. §103 as being unpatentable over Roffman et al in view of Callahan et al. The Examiner asserted that it would have been obvious to make the intraocular lens of Roffman et al of silicone or hydrogel since Callahan et al teach intraocular lenses made of such materials. The Examiner further asserted that it would have been obvious to adapt the Roffman et al lens for implanting in the posterior chamber of the eye as Callahan et al teach such lenses. Finally, claims 87 and 88 were rejected under 35 U.S.C. §103 as being unpatentable over Roffman et al in view of the Chipman et al U.S. Patent No. 6,183,084. The Examiner relied on Chipman et al as disclosing a lens made of acrylate.

However, Applicants submit that the intraocular correction lens and methods defined by the present claims 67-81 and 83-88 are neither anticipated by nor rendered obvious over Roffman et al, alone or in combination with Callahan et al or Chipman et al. Accordingly, these rejections are traversed and reconsideration is respectfully requested.

More particularly, as defined by clam 67, the intraocular lens of the invention has at least one aspheric surface and aberrations. When the lens aberrations are expressed as a linear combination of polynomial terms, the lens is capable of, in combination with a lens in the capsular bag of an eye, reducing similar such aberration terms obtained in a wavefront having passed the cornea, thereby obtaining an eye sufficiently free from aberrations. Thus, the present intraocular lens is a correction lens adapted for use in an eye together with a lens, either natural or implanted, in the capsular bag. Therefore, the claimed lens having the aspheric surface is configured, when its aberrations are expressed as a linear combination of polynomial terms, such that the claimed lens, together with the capsular bag lens, reduce the similar aberration terms obtained in a wavefront having passed the cornea (see, for example, the specification at page 4, lines 10-34). The aberration of the capsular bag lens is determined, for example, by using the wavefront aberration values of the whole eye and subtracting those values of the cornea or by modeling the optical system, as described, for example, at page 5, line 30-page 6, line 6.

Roffman et al disclose ophthalmic lenses that have zones of more than one optical power or focal length. Although the specific lenses exemplified by Roffman et al comprise spectacle lenses (Figs. 1 and 2) and contact lenses (Figs. 3a and 3b), Roffman et al mention that their lenses may comprise an intraocular lens (column 1, line 65) and that an intraocular lens is inserted as a replacement for a natural lens which has been removed (column 1, lines 19-21). Roffman et al further disclose that in the case of intraocular lenses, the corneal topography data may be combined with wavefront both on the lens' front surface, back surface or a combination thereof (column 5, lines 6-12) and that the lenses may be spherical or aspherical (column 5, lines 13-15).

However, Applicants find no teaching or suggestion by Roffman et al of an intraocular lens which has an aspheric surface and aberrations, which lens, when its aberrations are expressed as a linear combination of polynomial terms, is capable of, in combination with a lens in the capsular bag of an eye, reducing similar such aberration terms obtained in a wavefront

having passed the cornea. Importantly, Applicants find no teaching or suggestion by Roffman et al for measuring aberrations of the capsular bag lens and subsequently configuring an intraocular lens for use in combination therewith to reduce similar such aberration terms obtained in a wavefront having passed the cornea.

First, Roffman et al disclose that an intraocular lens replaces a natural lens (column 1, lines 19-21), and Applicants find no teaching or suggestion by Roffman et al for providing an intraocular correction lens as presently claimed adapted for use in combination with a capsular bag lens. More importantly, as detailed in the Declaration Under 37 C.F.R. 1.132 submitted herewith of the co-inventor Patricia Ann Piers, Roffman et al provide no teaching or suggestion to one of ordinary skill in the art for providing a lens with aberrations based on corneal and capsular lens bag aberrations, i.e., the wavefront aberrations of a wavefront having passed the corneal surface and the capsular bag lens. To the contrary, the Roffman et al lens design is based on measurements external to the eye and, optionally, corneal topography. As the Declaration Under 37 C.F.R. 1.132 details, Roffman et al do not teach or suggest to one of ordinary skill in the art how to provide an intraocular correction lens as presently claimed having at least one aspheric surface and aberrations and which, when the lens aberrations are expressed as a linear combination of polynomial terms, is capable, in combination with a lens in a capsular bag of an eye, of reducing similar such aberration terms obtained in a wavefront having passed the cornea, thereby obtaining an eye sufficiently free from aberrations.

Anticipation under 35 U.S.C. §102 requires that each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference, *In re Robertson*, 49 U.S.P.Q.2d 1949, 1950 (Fed Cir. 1999). In view of the failure of Roffman et al to teach a lens having at least one aspheric surface which when its aberrations are expressed as a linear combination of polynomial terms, is capable of, in combination with a lens in the capsular bag of an eye, reducing similar such aberration terms obtained in a wavefront having passed the

cornea, and in view of the failure of Roffman et al to teach one of ordinary skill in the art how to design such a lens, Roffman et al do not disclose each and every element of claim 67 and therefore do not anticipation claim 67, or any of claims 68-81 and 83-88 dependent thereon, under 35 U.S.C. §102.

Moreover, the deficiencies of Roffman et al are not resolved by Callahan et al or Chipman et al. That is, Callahan et al disclose haptics for an intraocular lens which is capable of being rolled for insertion through a small incision in the cornea, and disclose that the lens optic may be designed to replace the natural lens in an aphakic eye or to supplement and correct defects in the natural lens in a phakic eye. Chipman et al disclose progressive addition lenses which are designed to provide reduced astigmatism. Preferably, the Chapman et al lens is a spectacle lens (column 1, lines 66-67).

However, Applicants find no teaching or suggestion in Callahan et al or Chipman et al that would motivate one of ordinary skill in the art to combine any of the teachings of Callahan et al and/or Chipman et al with Roffman et al to resolve the deficiencies noted above or to result in the presently claimed intraocular lens and method. The mere fact that prior art could be modified to result in a claimed invention would not have made the modification obvious unless the prior art suggested the desirability of the modification, *In re Mills*, 16 U.S.P.Q. 1430 (Fed. Cir. 1990); *In re Fritch*, 23 U.S.P.Q. 2d 1780 (Fed. Cir. 1992). Neither Roffman et al, Callahan et al nor Chipman et al suggest the necessary modifications to result in the claimed intraocular correction lens or the desirability of any such modifications.

Importantly, Applicants find no teaching or suggestion by Callahan et al or Chipman et al that would have motivated one of ordinary skill in the art to construct the Roffman et al lens to have an aspheric surface which, when its aberrations are expressed as a linear combination of polynomial terms, is capable of, in combination with a lens in the capsular bag of an eye, reducing similar such aberration terms obtained in a wavefront having passed the cornea. In fact,

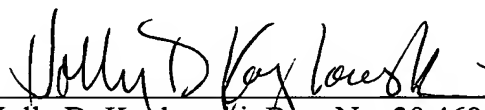
Applicants find no teaching or suggestion by Callahan et al or Chipman et al that an optic portion could be so configured, or that such a configured lens could be provided in the intraocular lens of Roffman et al, which is based on external wavefront aberration measurements and optionally corneal topography.

In order to render a claimed invention obvious, the prior art must enable one skilled in the art to make and use the claimed invention, *Motorola, Inc. v. Interdigital Tech. Corp.*, 43 U.S.P.Q.2d 1481, 1489 (Fed. Cir. 1997). In view of the disparities and deficiencies in the teachings of Roffman et al, Callahan et al, and Chipman et al, these references in combination do not enable one of ordinary skill in the art to make and use the intraocular lens of claim 67 or any of the claims dependent thereon, and therefore do not render these claims obvious.

It is therefore submitted that the lenses and methods defined by claims 67-81 and 83-88 are neither anticipated by nor rendered obvious over Roffman et al, alone or in combination with Callahan et al or Chipman et al, whereby the rejections under 35 U.S.C. §§ 102 and 103 have been overcome. Reconsideration is respectfully requested.

It is believed that the above represents a complete response to the objection and the rejections under 35 U.S.C. §§ 102 and 103, and places the present application in condition for allowance. Reconsideration and an early allowance are requested.

Respectfully submitted,



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